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EXAMINER

LAO, LUN S

ART UNIT PAPER NUMBER

2644

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/216,378

Applicant(s)

CHAN ET AL.

Examiner

Lun-See Lao

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-27 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-27 and 29-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **ETAILED ACTION**

### *Introduction*

1. This action responds to amendment filed on 03-11-2004. Claims 6 and 28 have been cancelled and claims 31-38 have been added. Claims 1-5, 7-27 and 29-38 are pending.

### ***Claim Objections***

2. Claim 30 is objected to because of the following informalities: because, the claim 30 is same as claim 38. Appropriate correction is required.

3. Claim 38 is objected to because of the following informalities: because, the claim 30 is same as claim 30. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 7-20, 22 and 24-27, 29-38, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lambrecht (US PAT. 6,259,792) in view of Denenberb (US PAT. 5,375,174) and Eatwell (US PAT. 5,828,768)

Consider claim 1, Lambrecht teaches that a personal computer comprising (see fig.1 col.2 lines 9-35):

Art Unit: 2644

a microphone (see fig.2, 108) for detecting ambient noise; a noise cancellation module coupled to the microphone that generates a noise cancellation signal responsive to the detected ambient noise (see fig.1 col.2 lines 9-45); and the noise cancellation signal provided from a desired source for provision to a standard headphone (see fig. 1 and col. 2 lines 55-64); but Lambrecht fails to teach that a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to a standard headphone compatible audio output connection to reduce headphone noise and does not clearly teach a built-in microphone for detecting ambient noise.

However, Denenberg teach a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to a standard headphone compatible audio output connection to reduce headphone noise (see col.2 lines 5-20).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve an audio entertainment system or a communications system can be combined with a noise control system and the system of this teaching to provide a better sound fidelity.

On the other hand, Eatwell teaches a built-in microphone (see fig.5, (53-54)) for detecting ambient ( such running fan) noise (see col.5 lines 20-40 and col. 6 line 54- col.7 line 9).

Therefore, it would be obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Eatwell to achieve a multimedia computer to perform well in noisy environments.

Consider claims 2-3, Lambrecht discloses that the personal computer of further comprising an optical disc drive for providing the audio signal (see col.2 lines 9-35 and col.3 lines 35-42) and the noise reduction scheme of the noise cancellation module comprises a software program running on a processor (see col.5 line 40-col.6 line 25).

Consider claim 4, Lambrecht discloses that the personal computer wherein the microprocessor is the central processing unit for the computer system (see col.3 lines 10-22).

Consider claim 5, Eatwell discloses that the noise reduction scheme includes the digital signal processor is located on a sound board (see col.6 line 15-col.7 line 10).

Consider claims 6-7, Lambrecht discloses that the personal computer of the audio output connection is compatible with a standard set of headphones (see fig.2 #108 and col.3 lines 3-12) and the computer system is a mobile computer (see fig.1).

Consider claim 8, Lambrecht discloses that a method of reducing ambient noise normally heard by a user through headphones when listening to audio provided via a mobile computer system, comprising (see fig.1 and col.2 lines 7-35): detecting the ambient noise via a microphone (see fig.2, 108) (see col.3 lines 50-63); generating a noise cancellation signal based on the detected ambient noise; but Lambrecht fails to teach a mixing the noise cancellation signal with the audio from the compact disc, wherein the mixed signal is applied to a standard headphone compatible audio output

Art Unit: 2644

connection to reduce the ambient noise in the headphones and does not clearly teach detecting the ambient noise via a microphone built-in to the mobile computer system.

However, Denenberg teaches a mixing the noise cancellation signal with the audio from the compact disc, wherein the mixed signal is applied to a standard headphone compatible audio output connection to reduce the ambient noise in the headphones (see col.2 lines 5-20).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve a communications system to provide a better sound fidelity.

On the other hand, Eatwell teaches detecting the ambient (such as running fan) noise via a microphone (see fig.5, (53-54)) built-in to the mobile computer system (see col.5 lines 20-40 and col. 6 line 54-col.7 line 9).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Eatwell to achieve a multimedia computer to perform well in noisy environments.

Consider claim 9-12, Lambrecht teaches that the method of reducing ambient noise further comprising converting the detected ambient noise to an electrical signal (see col.3 line 45-col.4 line 25); detecting the ambient noise is performed using a built-in microphone within the mobile computer system (see fig.1 # 154 and col.3 lines 2-30) and the generation of the noise cancellation signal is done when the optical disc drive is active (see col.2 lines 9-35 and col.5 line 20-col.6 line 47); generation of the noise

Art Unit: 2644

cancellation signal is initiated manually via a software interface (see col.2 lines 9-35 and col.5 line 40-col. line 50).

Consider claim 13, Lambrecht discloses that a machine readable medium having machine readable instructions stored thereon for causing a computer to perform the steps comprising (see col.3 lines 10-55): detecting environmental background noise via a microphone (see fig.2, 108); converting the detected environmental background noise into an electrical signal (see col.3 lines 25-61); generating a noise cancellation signal based on the electrical signal (see col.2 lines 9-35 and col.3 line 45-col.5 line 40); but Lambrecht fails to teach a mixing the noise cancellation signal with an audio signal for provision to a standard headphone compatible audio output connection to reduce headphone noise and does not clearly teach detecting environmental background noise via a microphone built-in to the computer.

However, Denenberg teaches a mixing the noise cancellation signal with an audio signal for provision to a standard headphone compatible audio output connection to reduce headphone noise (see col.1 line 60-col.2 line 45).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve a communications system to provide a better sound fidelity.

On the other hand, Eatwell teaches detecting environmental background noise via a microphone (see fig.5, (53-54)) built-in to the computer (see col.5 lines 20-40 and col. 6 line 54-col.7 line 9).

Therefore, it would be obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Eatwell to achieve a multimedia computer to perform well in noisy environments.

Consider claims 14-15, Lambrecht teaches that the machine readable medium of generating a noise cancellation signal is performed automatically when the optical disc drive is active (see col.3 line 20-col.4 line 56) and; of generating a noise cancellation signal is activated through a software interface (see col.4 lines 5-55).

Regarding claim 16, Lambrecht teaches that a personal computer comprising (see fig.1 #154):

a microprocessor (see fig.2, 108); memory coupled to the microprocessor (see fig.2);

a storage device coupled to the microprocessor; a microphone for detecting ambient noise (see col.3 lines 3-61);

a noise cancellation module coupled to the microphone that generates a noise cancellation signal responsive to the detected ambient noise (see col.3 lines 45-61); but Lambrecht fails to disclose a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to a standard headset compatible audio output connection to reduce headphone noise and does not clearly teach a built-in microphone for detecting ambient noise.

However, Deenberg discloses a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to a



Art Unit: 2644

standard headset compatible audio output connection to reduce headphone noise (see col.2 lines 5-20).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve a communications system to provide a better sound fidelity.

On the other hand, Eatwell teaches a built-in microphone (see fig.5, (53-54)) for detecting ambient noise ( such as running fan and (see col.5 lines 20-40 and col. 6 line 54-col.7 line 9).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Eatwell to achieve a multimedia computer to perform well in noisy environments.

Consider claims 17-18, Lambrecht teaches that the personal computer of further comprising an integrated display device and computer comprises a mobile computer system having an integrated source of power (see fig.1 #154).

Consider claims 19-20, Lambrecht teaches that the personal computer of the noise cancellation module is part of the microprocessor (see col.6 lines 5-25) and the personal computer comprises a mobile computer system and the noise cancellation module is provided by the microprocessor (see col.6 lines 5-50).

Consider claim 22, Denenberg teaches that the noise cancellation signal is mixed with the audio signal (in-coming communication) to cancel ambient noise such that the audio signal is audible through a speaker (see fig.3 (33,32)) couple to the audio output connection (see col.2 lines 5-20).

Art Unit: 2644

Consider claim 24 Lambrecht teaches a mobile computer comprising:

a microphone (see fig.2,108) integrated into the mobile computer for detecting ambient noise (see col.2 lines 9-45);

a noise cancellation software (see col.5 line 50-col.6 line 50) module coupled to the microphone (108) that generates a noise cancellation signal responsive to the detected ambient noise, and inherently having a profile (because microsoft's direct sound and see col. 3 lines 22-28) for compensating for keyboard key clicks (such as one kind of environment noise) detected by the microphone, but Lambrecht fails to teach that a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to an audio output connection for a standard headset.

However, Denenberg teaches that a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to an audio output connection for a standard headset (see col.5 line 10-25).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve stereo headphones to provide a better sound fidelity.

Consider claims 25-28, Lambrecht teaches that the mobile computer of the audio output connection comprises an analog output port ( col.5 lines 10-25); and a digital to analog converter coupled between the digital signal processor and analog output port( see fig.2); and the noise cancellation signal is generated when a source of audio output

Art Unit: 2644

is activated (see col.1 line 20-col.2 line5); and microphone is a built-in microphone of said personal computer (see col.3 lines 3-15).

Consider claims 29-30 Lambrecht teaches that the personal computer of noise cancellation module generates the noise cancellation signal based on said ambient noise, said noise cancellation signal being generated in a format suitable to reduce headphone noise in the standard set (see col1 line 20-col.2 line 35); but, Lambrecht does not clearly teach headphones connected via the audio output connection.

However, Denenberg teach the noise cancellation signal with an audio signal provided to a standard headphone compatible audio output connection to reduce headphone noise (see col.2 lines 5-20).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve an audio entertainment system or a communications system can be combined with a noise control system and the system of this teaching to provide a better sound fidelity.

Consider claims 30, 32, 34 and 38, Denenberg teaches headphone noise comes from a same source as said ambient noise (see col.2 line 4-44 and col.4 line 34-51).

Consider claims 31 and 33, Lambrecht teaches that the noise cancellation signal is generated based on the detected ambient noise in a format suitable to reduce headphone noise in the standard set of headphones (see figs 1-2 and col.2 line 55-col.3

line 61); but Lambrecht does not clearly teach that the headphones connected via the audio output connection.

However, Denenberg teaches that the noise cancellation signal is generated based on the detected ambient noise in a format suitable to reduce headphone noise in the standard set of headphones connected via the audio output connection (see col.2 line 4-col.3 line 23 and col.4 line 34-51).

Therefore, it would be obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve an audio entertainment system or a communications system can be combined with a noise control system and the system of this teaching to provide a better sound fidelity.

Consider claims 35 and 37, Lambrecht teaches that the personal computer of the noise cancellation module generates the noise cancellation signal based on said ambient noise, said noise cancellation signal being generated in a format suitable to reduce headphone noise in the standard set; but Lambrecht does not clearly teach that the headphones connected via the audio output connection.

However, Denenberg teaches that the noise cancellation module generates the noise cancellation signal based on said ambient noise, said noise cancellation signal being generated in a format suitable to reduce headphone noise in the standard set of headphones connected via the audio output connection (see col.2 line 4-col.3 line 23 and col.4 line 34-51).

Therefore, it would be obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve an audio

Art Unit: 2644

entertainment system or a communications system can be combined with a noise control system and the system of this teaching to provide a better sound fidelity.

6. Claims 21,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lambrecht (US PAT. 6,259,792), Denenberg (US PAT. 5,375,174) and Eatwell (US PAT. 5,828,768) as applied to claims 1, 8, and further in view of Markow (US PAT. 6,304,434).

Consider claims 21,23, Lambrecht and Denenberg differs from claims 21,23 in not disclosing that the audio source comprises a compact disc playing game or music sounds; and the audio from the compact disk comprises music.

However, Markow teaches that the audio source (see fig.3, 380) comprises a compact disc playing game or music sounds; and the audio from the compact disk comprises music (see col.2 lines 10-36).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to utilize the teaching of Lambrecht and Denenberg and Eatwell in to the teaching of Markow, so that the system provide an audio entertainment system.

7. Claims 24-27 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eatwell (US PAT. 5,828,768) in view of Denenberb (US PAT. 5,375,174).

Consider claim 24 Eatwell teaches a mobile computer comprising:

a microphone (see fig.5, (53-54)) integrated into the mobile computer for detecting ambient noise (see col.5 lines 20-40 and col. 6 line 54-col.7 line 9).

a noise cancellation software (voice recognition software resides) module coupled to the microphone (see fig.15, 102) that generates a noise cancellation signal responsive to the detected ambient noise, and inherently ( because, the voice recognition software resides) having a profile for compensating for keyboard key clicks (such as, hard and floppy disk are based on background noise) detected by the microphone (see fig. 5 (53-54) and col.5 line 20-40), but Eatwell fails to teach that a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to an audio output connection for a standard headset.

However, Denenberg teaches that a digital signal processor for mixing the noise cancellation signal with an audio signal provided from a desired source for provision to an audio output connection for a standard headset (see col.5 line 10-25).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Eatwell and Denenberg to achieve stereo headphones to provide a better sound fidelity.

Consider claims 25-27, Eatwell teaches that the mobile computer of the audio output connection comprises an analog output port ( in the sound card and see col.6 lines 25-67); and a digital to analog converter coupled between the digital signal processor and analog output port (in the sound card and see col.6 lines 25-67); and the noise cancellation signal is generated when a source of audio output is activated (see col.6 line 53-col.7 line45).

Consider claim 37, Eatwell teaches that the personal computer of claim 16 wherein said noise cancellation module generates the noise cancellation signal based on said ambient noise, said noise cancellation signal being generated in a format suitable to reduce noise in the computer (see figs. 13, 15 and col.6 line 25-col. 7 line18); but Eatwell does not clearly teach to reduce headphone noise in the standard set of headphones connected via the audio output connection.

However, Denenberg teaches that the noise cancellation module generates the noise cancellation signal based on said ambient noise, said noise cancellation signal being generated in a format suitable to reduce headphone noise in the standard set of headphones connected via the audio output connection (see col.2 line 4-col.3 line 23 and col.4 line 34-51).

Therefore, it would obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Eatwell and Denenberg to achieve an audio entertainment system can be combined with a noise control system and the system of this teaching to provide a better sound fidelity.

### ***Response to Arguments***

8. Applicant's arguments filed on 03-11-2004 have been fully considered but they are not persuasive.

Applicant's arguments are not persuasive. Note the final office action for the examiner's position. As to the argued "standard headphone" (remarks, page 8), the claimed language does not provide specifics of the "standard", nor does the

Art Unit: 2644

specification as filed. The headphone assembly of Denenberg performs typical headphone functionality and thus is standard. As to the argument that Denenberg is not related to personal computers (remarks, page 8), Denenberg's headphone is used in a networked computer environment; ie, personal computers connected via a network. See Denenberg, col. 1, lines 25-35; col. 2, lines 38-44. As to the argument that Lambrecht and Denenberg are directed to different problems (remarks, page 9), while the environments wherein the respective teachings are implemented are different, both Lambrecht and Denenberg are directed to the same technology/problem which is noise cancellation. It is the teachings regarding the technology, rather than the respective implementation environments, of Lambrecht and Denenberg, that are combined. Regarding the argued synchronous controller of Denenberg (remarks, pages 9, 10), applicant's claims do not require nor exclude the controller being synchronous or asynchronous. The same is true as to the argued frequency range / transient. Regarding the argument that the combination of Lambrecht and Denenberg would fundamentally change the operation (remarks, page 10), Denenberg is relied on to teach using a DSP to mix the noise cancellation signal with an audio signal before providing such mixed signal to a headphone, as discussed in the rejection of claim 1. Using a DSP to mix the noise cancellation signal with an audio signal in Lambrecht would not change the intended operation of Lambrecht which is active noise cancellation. As to the argued profile (remarks, page 11), it is met by Lambrecht because noise characteristics/profiles are maintained by the system for selection. See Lambrecht, col. 6, lines 44-48.



Art Unit: 2644

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, therefore, it would be obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Denenberg to achieve a communications system to provide a better sound fidelity; and Therefore, it would be obvious to one of ordinary skill in the art at the time invention was made to combine the teaching of Lambrecht and Eatwell to achieve a multimedia computer to perform well in noisy environments.

Regarding to the argument that the references are directed towards different problems, the examiner's response is that while the respective environments wherein the teachings of Lambrecht and of Denenberg are implemented are different, the technology / problems are the same, which is noise cancellation. It is the teachings regarding the technology, rather than the respective implementation environments, of Lambrecht and Denenberg, that are combined.

Regarding to argument that the use of software to perform the noise cancellation, Lambrecht teaches the limitation (see col.5 line 50-col.6 line 25).

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**10. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any response to this action should be mailed to:

Mail Stop \_\_\_\_ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents  
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Facsimile responses should be faxed to:  
**(703) 872-9306**

Hand-delivered responses should be brought to:  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner


Art Unit: 2644

should be directed to Lao,Lun-See whose telephone number is (571) 272-7501 The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See  
Patent Examiner  
US Patent and Trademark Office  
Crystal Park 2  
571-272-7501  
Date 07-25-2005

  
**VIVIAN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**